

Title (en)
DISPENSER FOR DISPENSING CRYOGENIC LIQUID

Publication
EP 0331287 B1 19920325 (EN)

Application
EP 89300891 A 19890130

Priority
GB 8804760 A 19880229

Abstract (en)
[origin: EP0331287A1] A dispenser for cryogenic liquid comprising a vacuum insulated vessel (2) which is provided with a dispenser tube (10). The dispenser tube (10) is heated in use by an electric heater (11). Sufficient heat is supplied to achieve film boiling on the inner surface of the dispenser tube (10). Flow of cryogenic liquid from the vacuum insulated vessel (2) into the dispenser tube (10) is controlled by a tapered valve member (14) which is biased downwardly by a spring (15) and which is connected to a permanent magnet (16) disposed in a coil (17). The tapered valve member (14) can be driven upwardly or downwardly according to the sense in which a direct current is applied to the coil (17). A gas relief tube (18) is provided to vent gas from the dispenser tube (10) intermediate the tapered valve member (14) and the outlet of the dispenser tube (10). The gas relief tube (18) conveys gas to the space above the cryogenic liquid, for example liquid nitrogen, in the vacuum insulated vessel (2). The dispenser has particular utility in high speed canning and bottling lines.

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IPC 8 full level
B65B 31/00 (2006.01); **F17C 9/00** (2006.01)

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